



## 9.15 TOWN OF PINE PLAINS

This section presents the jurisdictional annex for the Town of Pine Plains.

### 9.15.1 Hazard Mitigation Plan Point of Contact

The following individuals have been identified as the hazard mitigation plan's primary and alternate points of contact.

Primary Point of Contact	Alternate Point of Contact
Brian Coons, Supervisor 3284 Route 199, Pine Plains, NY 12567 (518) 398-8600 <a href="mailto:supervisor@pineplains-ny.gov">supervisor@pineplains-ny.gov</a>	Rich Prentice 3284 Route 199, Pine Plains, NY 12567 845-518-8509 <a href="mailto:DCF120@optimum.net">DCF120@optimum.net</a>

### 9.15.2 Municipal Profile

The Town of Pine Plains was settled around 1740 by missionaries in the New York region. It was originally part of the Little Nine Partners Patent, a land grant between the State of New York and local Native Americans. The land making up the Town was actually part of the Town of North East but was eventually incorporated as its own Town in 1823. Today, the Town is 31.4 square miles in area and contains a population of approximately 2,473 people and roughly 1,284 housing units according to the 2010 Census.

The Town is located in the north central region of Dutchess County and abuts Columbia County. The Town is also bounded by the Towns of Milan, Stanford, and North East to the west, south, and east respectively. Most of the Town contains agricultural land with wooded hills on the far western region of the Town. Two major roadways run across the Town; Route 199, running east and west, and Route 82, running north and south. The two routes intersect in the Hamlet of Pine Plains which is the most developed region in the Town. Other hamlets in the town include Bethel, Hammertown, and Pachin Mills. While much of the Town is very rural in nature, Pine Plains Hamlet is much more suburban and contains the Town's concentration of housing and businesses. Community facilities in the Town include the Town Hall, public works facilities, police department, fire department, water facilities, and three schools.

### Growth/Development Trends

The following table summarizes recent residential/commercial development since 2010 to present and any known or anticipated major residential/commercial development and major infrastructure development that has been identified in the next five years within the municipality. Refer to the map in Section 9.15.8 of this annex which illustrates the hazard areas along with the location of potential new development.

**Table 9.15-1. Growth and Development**

Property or Development Name	Type (e.g. Res., Comm.)	# of Units / Structures	Location (address and/or Parcel ID)	Known Hazard Zone(s)	Description/Status of Development
<b>Recent Development from 2010 to present</b>					
Carvel Property Development	Res	TBD	Multiple Parcels	N/A	Planning
Town Centre Development	Res/Comm	TBD	Town Centre Road west of Pioneer Drive	N/A	Ongoing
PPCSD Bus Garage	Comm	1	6872-19-552065	Waste Water (wash rock)	Planning
<b>Known or Anticipated Development in the Next Five (5) Years</b>					



Property or Development Name	Type (e.g. Res., Comm.)	# of Units / Structures	Location (address and/or Parcel ID)	Known Hazard Zone(s)	Description/Status of Development
None					

\* Only location-specific hazard zones or vulnerabilities identified.

### 9.15.3 Natural Hazard Event History Specific to the Municipality

Dutchess County has a history of natural and non-natural hazard events as detailed in Volume I, Section 5.0 of this plan. A summary of historical events is provided in each of the hazard profiles and includes a chronology of events that have affected the County and its municipalities. For the purpose of this Plan, events that have occurred in the County from 2008 to present were summarized to indicate the range and impact of hazard events in the community. Information regarding specific damages is included, if available, based on reference material or local sources. This information is presented in the table below. For details of these and additional events, refer to Volume I, Section 5.0 of this plan.

**Table 9.15-2. Hazard Event History**

Dates of Event	Event Type	FEMA Declaration # (If Applicable)	County Designated?	Summary of Damages/Losses
February 24, 2010	Heavy Snow	N/A	N/A	Highway Dept. responded to open and clear roads to public facilities over a 48hr period of time.
December 26-27, 2010	Severe Winter Storm and Snowstorm / Nor'Easter	DR-1957	Yes	Hwy responded to open and clear roads to public facilities (over a 48hr eligible period of time). Town incurred just under \$27,000 in costs.
August 26 – September 5, 2011	Hurricane Irene	DR-4020	Yes	Hwy responded to open and clear road of downed trees and debris to public facilities.
October 29-30, 2011	Nor'Easter, Heavy Snow	N/A	N/A	Hwy responded to open and clear roads to public facilities over a 48hr period of time.
October 27 – November 8, 2012	Hurricane Sandy	EM-3351	Yes	Minimal overtime costs associated with storm cleanup for Highway Personnel.
February 12-13, 2014	Winter Storm	N/A	N/A	Hwy responded to open and clear roads to public facilities over a 48hr period of time.

### 9.15.4 Hazard Vulnerabilities and Ranking

The hazard profiles in Section 5.0 of this plan have detailed information regarding each plan participant's vulnerability to the identified hazards. The following summarizes the hazard vulnerabilities and their ranking in the Town of Pine Plains. For additional vulnerability information relevant to this jurisdiction, refer to Section 5.0.

#### Hazard Risk/Vulnerability Risk Ranking

The table below summarizes the hazard risk/vulnerability rankings of potential hazards for the Town of Pine Plains.

**Table 9.15-3. Hazard Risk/Vulnerability Risk Ranking**

Hazard type	Estimate of Potential Dollar Losses to Structures Vulnerable to the Hazard <sup>a, c</sup>	Probability of Occurrence	Risk Ranking Score (Probability x Impact)	Hazard Ranking <sup>b</sup>
Coastal Storm	100-year MRP: \$917,084.00	Frequent	48	High



Hazard type	Estimate of Potential Dollar Losses to Structures Vulnerable to the Hazard <sup>a, c</sup>	Probability of Occurrence	Risk Ranking Score (Probability x Impact)	Hazard Ranking <sup>b</sup>
	500-year MRP: 5065033 Annualized: \$63,931.00			
Drought	Damage estimate not available	Frequent	42	High
Earthquake	100-Year GBS: \$0 500-Year GBS: \$197,961 2,500-Year GBS: \$2,260,785	Occasional	32	High
Extreme Temperature	Damage estimate not available	Frequent	30	Medium
Flood	1% Annual Chance: \$26,283,658	Frequent	36	High
Severe Storm	100-Year MRP: \$917,084 500-year MRP: \$5,065,033 Annualized: \$63,931	Frequent	48	High
Winter Storm	1% GBS: \$8,006,379 5% GBS: \$40,031,894	Frequent	51	High
Wildfire	Estimated Value in the WUI: \$936,467,423	Frequent	42	High

Notes:

GBS = General building stock; MRP = Mean return period.

- The general building stock valuation is based on the custom inventory generated for the municipality and based on improved value.
- High = Total hazard priority risk ranking score of 31 and above  
Medium = Total hazard priority risk ranking of 20-30+  
Low = Total hazard risk ranking below 20
- Loss estimates for the severe storm and severe winter storm hazards are structural values only and do not include the estimated value of contents. The earthquake and hurricane wind hazards were evaluated by Census tract. The Census tracts do not exactly align with municipal boundaries; therefore, a total is reported for each Town inclusive of the Villages. Loss estimates for the flood and earthquake hazards represent both structure and contents. Potential flood loss estimates were generated using Hazus-MH 2.2 and the 2011 FEMA DFIRM for the 1-percent annual chance event. For the wildfire hazard, the improved value and estimated contents of buildings located within the identified hazard zones is provided.

## National Flood Insurance Program (NFIP) Summary

The following table summarizes the NFIP statistics for the Town of Pine Plains.

**Table 9.15-4. NFIP Summary**

Municipality	# Policies (1)	# Claims (Losses) (1)	Total Loss Payments (2)	# Rep. Loss Prop. (1)	# Severe Rep. Loss Prop. (1)	# Policies in 100-year Boundary (3)
Town of Pine Plains	14	1	\$2,169.72	0	0	8

Source: FEMA Region 2, 2014

(1) Policies, claims, repetitive loss and severe repetitive loss statistics provided by FEMA Region 2, and are current as of 12/31/2014. Please note the total number of repetitive loss properties includes the severe repetitive loss properties. The number of claims represents claims closed by 12/31/14.

(2) Total building and content losses from the claims file provided by FEMA Region 2.

(3) The policies inside and outside of the flood zones is based on the latitude and longitude provided by FEMA Region 2 in the policy file.

Notes: FEMA noted that where there is more than one entry for a property, there may be more than one policy in force or more than one GIS possibility.

A zero percentage denotes less than 1/100th percentage and not zero damages or vulnerability as may be the case.

Number of policies and claims and claims total exclude properties located outside County boundary, based on provided latitude and longitude

## Critical Facilities

The table below presents HAZUS-MH estimates of the damage and loss of use to critical facilities in the community as a result of a 1- and 0.2-percent annual chance flood events.





Table 9.15-5. Potential Flood Losses to Critical Facilities

Name	Type	Exposure		Potential Loss from 1% Flood Event		
		1% Event	0.2% Event	Percent Structure Damage	Percent Content Damage	Days to 100-Percent <sup>(1)</sup>
None						

Source: Dutchess County, NYGIS

Note (1): HAZUS-MH 2.2 provides a general indication of the maximum restoration time for 100% operations. Clearly, a great deal of effort is needed to quickly restore essential facilities to full functionality; therefore this will be an indication of the maximum downtime (HAZUS-MH 2.1 User Manual).

Note (2): In some cases, a facility may be located in the DFIRM flood hazard boundary; however HAZUS did not calculate potential loss. This may be because the depth of flooding does not amount to any damages to the structure according to the depth damage function used in HAZUS for that facility type. Further, HAZUS-MH may estimate potential damage to a facility that is outside the DFIRM because the model generated a depth grid beyond the DFIRM boundaries.

X Facility located within the DFIRM boundary

- Not calculated by HAZUS-MH 2.2

### Other Vulnerabilities Identified

The municipality has identified the following vulnerabilities within their community:

- Stissing Mountain Area

### 9.15.5 Capability Assessment

This section identifies the following capabilities of the local jurisdiction:

- Planning and regulatory capability
- Administrative and technical capability
- Fiscal capability
- Community classification
- National Flood Insurance Program
- Integration of Mitigation Planning into Existing and Future Planning Mechanisms

### Planning and Regulatory Capability

The table below summarizes the regulatory tools that are available to the Town of Pine Plains.

Table 9.15-6. Planning and Regulatory Tools

Tool / Program (code, ordinance, plan)	Do you have this? (Yes/No) If Yes, date of adoption or update	Authority (local, county, state, federal)	Dept. /Agency Responsible	Code Citation and Comments (Code Chapter, name of plan, explanation of authority, etc.)
<b>Planning Capability</b>				
Master Plan	Yes	Town Board	PP TB	
Capital Improvements Plan	No			
Floodplain Management / Basin Plan	Yes	Pine Plains	Building Inspector – Drew Weaver	Local Law #1 of 2012
Stormwater Management Plan	No			
Open Space Plan	No			



Tool / Program (code, ordinance, plan)	Do you have this? (Yes/No) If Yes, date of adoption or update	Authority (local, county, state, federal)	Dept. /Agency Responsible	Code Citation and Comments (Code Chapter, name of plan, explanation of authority, etc.)
Stream Corridor Management Plan	No			
Watershed Management or Protection Plan	No			
Economic Development Plan	No			
Comprehensive Emergency Management Plan	Yes	Town Board	Supervisor	
Emergency Response Plan	No			
Post-Disaster Recovery Plan	No			
Transportation Plan	No			
Strategic Recovery Planning Report	No			
Other Plans:				
<b>Regulatory Capability</b>				
Building Code	Yes	State & Local	CE	Local Law #3 of 2007
Zoning Ordinance	Yes	Town Board	ZBA	Local Law #2 & #3 of 2015
Subdivision Ordinance	Yes	Town Board	CE,PB & ZBA	Local Law #2 & #3 of 2015
NFIP Flood Damage Prevention Ordinance	Yes	Town Board	FPA/Building Inspector	Local Law #2 & #3 of 2015
NFIP: Cumulative Substantial Damages	No			
NFIP: Freeboard	Yes	State, Local	FPA/Building Inspector	State mandated BFE+2 for single and two-family residential construction, BFE+1 for all other construction types
Growth Management Ordinances	No			
Site Plan Review Requirements	Yes	Pine Plains	Planning Board	Local Law #2 & #3 of 2015
Stormwater Management Ordinance	No			
Municipal Separate Storm Sewer System (MS4)	No			
Natural Hazard Ordinance	No			
Post-Disaster Recovery Ordinance	No			
Real Estate Disclosure Requirement	Yes	State		NYS mandate, Property Condition Disclosure Act, NY Code - Article 14 §460-467
Other [Special Purpose Ordinances (i.e., sensitive areas, steep slope)]				



### Administrative and Technical Capability

The table below summarizes potential staff and personnel resources available to the Town of Pine Plains.

**Table 9.15-7. Administrative and Technical Capabilities**

Resources	Is this in place? (Yes or No)	Department/ Agency/Position
<b>Administrative Capability</b>		
Planning Board	Yes	Planning Board
Mitigation Planning Committee	No	
Environmental Board/Commission	Yes	Conservation Advisory Council
Open Space Board/Committee	No	
Economic Development Commission/Committee	No	
Maintenance Programs to Reduce Risk	No	
Mutual Aid Agreements	Yes	Town Board
<b>Technical/Staffing Capability</b>		
Planner(s) or Engineer(s) with knowledge of land development and land management practices	Yes	Planner – Bonnie Franson
Engineer(s) or Professional(s) trained in construction practices related to buildings and/or infrastructure	Yes	Engineer – Morris Associates
Planners or engineers with an understanding of natural hazards	Yes	Morris Associates/Nelson Pope Voorhis
NFIP Floodplain Administrator	Yes	Code Enforcement Officer
Surveyor(s)	Yes	Town Board
Personnel skilled or trained in GIS and/or HAZUS-MH applications	Yes	Planning Board
Scientist familiar with natural hazards	No	
Emergency Manager	Yes	Rich Prentice
Grant Writer(s)	Yes	Martin Schneider
Staff with expertise or training in benefit/cost analysis	No	
Professionals trained in conducting damage assessments	Yes	Building Inspector, Emergency Manager

### Fiscal Capability

The table below summarizes financial resources available to the Town of Pine Plains.

**Table 9.15-8. Fiscal Capabilities**

Financial Resources	Accessible or Eligible to Use (Yes/No)
Community development Block Grants (CDBG, CDBG-DR)	No – CDBG
Capital Improvements Project Funding	Yes
Authority to Levy Taxes for specific purposes	Yes
User fees for water, sewer, gas or electric service	Yes – water
Impact Fees for homebuyers or developers of new development/homes	Yes – Recreation Fees
Stormwater Utility Fee	No
Incur debt through general obligation bonds	Yes



Financial Resources	Accessible or Eligible to Use (Yes/No)
Incur debt through special tax bonds	No
Incur debt through private activity bonds	No
Withhold public expenditures in hazard-prone areas	No
Other Federal or State Funding Programs	Yes
Open Space Acquisition Funding Programs	No
Other	

### Community Classifications

The table below summarizes classifications for community program available to the Town of Pine Plains.

**Table 9.15-9. Community Classifications**

Program	Do you have this? (Yes/No)	Classification (if applicable)	Date Classified (if applicable)
Community Rating System (CRS)	No		
Building Code Effectiveness Grading Schedule (BCEGS)	No		
Public Protection (ISO Fire Protection Classes 1 to 10)	No		
Storm Ready	No		
Firewise	No		
Disaster/Safety Programs in/for Schools	No		
Organizations with Mitigation Focus (advocacy group, non-government)	No		
Public Education Program/Outreach (through website, social media)	No		
Public-Private Partnerships	No		

*N/A = Not applicable. NP = Not participating. - = Unavailable. TBD = To be determined.*

The classifications listed above relate to the community's ability to provide effective services to lessen its vulnerability to the hazards identified. These classifications can be viewed as a gauge of the community's capabilities in all phases of emergency management (preparedness, response, recovery and mitigation) and are used as an underwriting parameter for determining the costs of various forms of insurance. The CRS class applies to flood insurance while the BCEGS and Public Protection classifications apply to standard property insurance. CRS classifications range on a scale of 1 to 10 with class 1 being the best possible classification, and class 10 representing no classification benefit. Firewise classifications include a higher classification when the subject property is located beyond 1000 feet of a creditable fire hydrant and is within 5 road miles of a recognized Fire Station.

Criteria for classification credits are outlined in the following documents:

- The Community Rating System Coordinators Manual
- The Building Code Effectiveness Grading Schedule
- The ISO Mitigation online ISO's Public Protection website at <http://www.isomitigation.com/ppc/0000/ppc0001.html>
- The National Weather Service Storm Ready website at <http://www.weather.gov/stormready/howto.htm>





- The National Firewise Communities website at <http://firewise.org/>

### Self-Assessment of Capability

The table below provides an approximate measure of the Town of Pine Plains' capability to work in a hazard-mitigation capacity and/or effectively implement hazard mitigation strategies to reduce hazard vulnerabilities.

**Table 9.15-10. Self-Assessment Capability for the Municipality**

Area	Degree of Hazard Mitigation Capability		
	Limited (If limited, what are your obstacles?)*	Moderate	High
Planning and Regulatory Capability	X		
Administrative and Technical Capability	X		
Fiscal Capability		X	
Community Political Capability	X		
Community Resiliency Capability	X		
Capability to Integrate Mitigation into Municipal Processes and Activities.	X		

### National Flood Insurance Program

#### NFIP Floodplain Administrator (FPA)

The Town of Pine Plains' floodplain administrator is Drew Weaver, who is also the Town's Building Inspector.

#### Flood Vulnerability Summary

There have been no reported flood damages to structures in the Town of Pine Plains in the last decade. NFIP claim statistics show one claim, for just over \$2,000.00, since 1978.

#### Resources

Floodplain management is the responsibility of the Town's FPA. Flood plain development permits are required by Pine Plains Local Law #1 of 2012. All permit records are kept on file in the code enforcement office. Inspections are done by the flood plain administrator and often in conjunction with the Town Engineer. While other Town officials assist in floodplain management, the FPA has not dedicated staff for floodplain management. The Town does not provide flood-specific education and outreach to the community.

#### Compliance History

The Town of Pine Plains is in good standing with the NFIP, but there has not been a Community Assistance Visit (CAV) conducted in the Town.

#### Regulatory

The Town's flood damage prevention ordinance is codified as Pine Plains Local Law #1 of 2012. It regulates development in the floodplain in accordance with the requirements of the NFIP and NYS. Floodplain management is supported by other programs, including the Town's planning and zoning requirements. The Pine Plains Planning Board hears and decides all requests for variances to this Local law. The current Building Code of NYS contains requirements for flood-resistant construction.





## Community Rating System

The Town of Pine Plains does not participate in the Community Rating System (CRS) program.

## Integration of Hazard Mitigation into Existing and Future Planning Mechanisms

For a community to succeed in reducing long-term risk, hazard mitigation must be integrated into the day-to-day local government operations. As part of this planning effort, each community was surveyed to obtain a better understanding of their community's progress in plan integration. A summary is provided below. In addition, the community identified specific integration activities that will be incorporated into municipal procedures.

### Planning

**Land Use Planning:** The Town has a Planning Board and Zoning Board of Appeals which review all applications for development and consider natural hazard risk areas in their review. Many development activities require additional levels of environmental review, specifically NYS SEQRA and Federal NEPA requirements.

**Town of Pine Plains Comprehensive Plan 2004:** The Town completed a Comprehensive Plan, which included the identification of natural hazard risk areas like floodplains, wetlands, and steep slopes, as well as land use and zoning recommendations for managing those risks. Some of the recommendations included the following:

1. Development standards will help protect many critical resources in Pine Plains. Currently, existing standards are applied only to projects going through site plan review. The Town should strengthen these design standards as outlined in this plan, apply them to all new commercial development and adopt them as a local law. Existing design standards that are applied to projects undergoing site plan review should seek to avoid development where the following exist:
  - Slopes greater than 15%,
  - Shallow bedrock,
  - High ground water and soils that percolate poorly,
  - Flood hazard areas including the 100-year floodplain,
  - Wetlands,
  - Soil subject to erosion, and
  - Along the fringes of water bodies or streams.
2. Create a Conservation District: Conservation – The boundaries of this district should be established to include areas of steep slope, stream buffers, exposed bedrock, wetlands, and floodplains. It is recommended that the conservation area establish standards so that open space and critical environmental features are protected.

**Conservation Planning:** The Town of Pine Plains has a Conservation Advisory Council that is tasked with advising the Planning and Zoning Board on conservation and environmental related issues for subdivision and major development applications.

### Regulatory and Enforcement (Ordinances)

**Zoning Code Section 100:** The Town's zoning code includes districts and standards pertaining to the mitigation of hazards. These sections include the Floodplain regulations, stormwater management & erosion control standards.



**Flood Damage Prevention Law No.1 and 2:** It is the purpose of this chapter to promote the public health, safety, and general welfare and to minimize public and private losses due to flood conditions in specific areas by provisions designed to:

- A. Regulate uses which are dangerous to health, safety and property due to water or erosion hazards or which result in damaging increases in erosion or in flood heights or velocities;
- B. Require that uses vulnerable to floods, including facilities which serve such uses, be protected against flood damage at the time of initial construction;
- C. Control the alteration of natural floodplains, stream channels, and natural protective barriers which are involved in the accommodation of floodwaters;
- D. Control filling, grading, dredging and other development which may increase erosion or flood damages;
- E. Regulate the construction of flood barriers which will unnaturally divert floodwaters or which may increase flood hazards to other lands; and
- F. Qualify for and maintain participation in the National Flood Insurance Program.

**Freshwater Wetlands Section 100.40:** Any building permit application that proposes activities that would disturb any area regulated by the U.S. Army Corps of Engineers or the New York State Department of Environmental Conservation (NYSDEC) as freshwater wetlands shall comply with the Article 24 and Title 23 of Article 71, Environmental Conservation Law and/or the federal Section 404 law. Freshwater wetland boundaries shall be flagged and verified by the NYSDEC or the US Army Corps of Engineers.

**Local Protection of Streams Section 100:** Any activity requiring site plan, special use permit, or subdivision plan approval, that is proposed within 100 feet of a stream or its banks shall be reviewed and approved by the Planning Board. No alteration, whether by excavation, filling, grading, clearing, draining or similar disturbance shall be made that will negatively impact a stream. The Planning Board, in its discretion, and based on a consideration of the extent and type of disturbance to the stream and/or the adjoining 100-foot regulated area, may require submission of analyses to determine how said disturbances affect the water level and flow, recharge, drainage patterns, water quality, and aquatic ecosystems associated with said stream. The Planning Board shall ensure that any activity is conducted in a manner that minimizes potential environmental impacts to the stream. Where the applicant must obtain a stream disturbance or discharge permit from the NYSDEC, Planning Board approval shall be conditioned on the agency's approval.

### **Funding**

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**Operating Budget:** The Town's operating budget contains minimal provisions for expected repairs like snow removal and infrastructure repair after a storm or natural disaster.

### **Education and Outreach**

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The Town posts news and information on its home page. The Town has an emergency management web page with links to the County and State resources. The Planning Department is a member of the Dutchess County Planning Federation and attends trainings and researches best practices that other communities are implementing. The Town has planned to budget for training for personal including professional development geared towards health and safety.

### **9.15.6 Mitigation Strategy and Prioritization**

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This section discusses past mitigations actions and status, describes proposed hazard mitigation initiatives, and prioritization.



### **Past Mitigation Initiative Status**

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The following table indicates progress on the community's mitigation strategy identified in the 2010 Plan. Actions that are carried forward as part of this Plan are included in the following subsection in its own table with prioritization. Previous actions that are now on-going programs and capabilities are indicated as such in the following table and may also be found under 'Capability Assessment' presented previously in this annex.



**Table 9.15-11. Past Mitigation Initiative Status**

2010 Mitigation Action	Responsible Party	Status (In progress, No progress, Complete)	Describe Status	Next Step (Include in 2015 HMP? or Discontinue)	Describe Next Step
Update of Chapter 100-39 (Flood Hazard Areas) of the Town Zoning Code. Risk exposure change from Q3 to DFIRM for Pine Plains is 114% for flooding on the Shehomeko Creek and Jansen Kill.	Town Board, Planning/Zoning Boards	No progress	Lack of resources	Discontinue	Minimal Risk
Prepare & Enact a drought management ordinance to include provisions for the approximately 6000 acres of crop and posture land, or 34% of total area in the Town.	Town Board, Planning/Zoning Boards	No progress	Lack of resources	Include in 2015 HMP	No change
New Wildfire Ordinance including defensible space measures for wildfire risk areas with improved property accounting for roughly 7000 acres in town.	Town Board, Planning/Zoning Boards	No progress	Lack of resources	Include in 2015 HMP	No change
Culvert Upgrades and replacements on Tripp McGhee Road to mitigate future flooding and soil erosion.	Town Board/Town Hwy	In Progress	Job bid out and a contract has been awarded.	Include in 2015 HMP	Maintain current wording
Update Chapter 100-40 (Freshwater Wetlands) and 100-411 (Local protection of streams) based on forthcoming DFIRM implementation	Town Board	No progress	Lack of resources	Include in 2015 HMP	No change



2010 Mitigation Action	Responsible Party	Status (In progress, No progress, Complete)	Describe Status	Next Step (Include in 2015 HMP? or Discontinue)	Describe Next Step
Create information about safety measures and emergency shelter in extreme cold weather. Disseminate in print and post to town website (in response to ice storms of Dec 08' and Jan 09'.	Town Board	Complete	Community links on website for county and government agencies.	Discontinue	Action was completed
Public Awareness Program on Hazards, Prevention, and Mitigation: Assist CPG Chairperson in maintenance of mitigation planning web presence: assist CPG Chairperson in preparation of annual hazards and mitigation planning fact sheet and its distribution; assist CPG chairperson in preparation of hazards survey; periodic discussion of hazard mitigation and the mitigation plan at other regular local meetings; use of annual flyers, newsletters, advertisements, or radio/tv announcements, etc. at the discretion of the jurisdiction (incorporation as much free information as possible from the FEMA publications Warehouse and other appropriate sources.					
See above	Town Board	Complete	1. Community Links on website for county and federal government agencies 2. Brochures/Advertisements posted at town hall and on website.	Discontinue	Action was completed
Code update: Review existing local codes and ordinances against the identified hazards to determine whether there need to be any amendments to address identified hazards and where a need is identified, modify/amend the codes/ordinances as applicable.	Town Board/Code Enforcement Officer	Complete	Complete - Local Law was updated in 2012	Discontinue	Action was completed
Code Enforcement: Enforce NYS and Local Building Codes with Continual CEO Training	Town Board Code Enforcement Officer	In Progress	Ongoing – CEO receives a minimum of 24 hours in service training a year.	Include in 2015 HMP	Maintain current wording
Update/Revise Floodplain management ordinances to be consistent with new FIRMs	Town Board	Complete	Completed 2012	Discontinue	Action was completed
Require Staff involved with Floodplain Management and ordinance enforcement to become Certified Floodplain Managers (CFA's)	Town Board	Complete	Completed 2012	Discontinue	Action was completed



2010 Mitigation Action	Responsible Party	Status (In progress, No progress, Complete)	Describe Status	Next Step (Include in 2015 HMP? or Discontinue)	Describe Next Step
Join the Community Rating Systems (CRS)	Town Board	No Progress	1. No discussions have taken place to join CRS.	Include in the 2015 HMP	No change



### Completed Mitigation Initiatives not Identified in the Previous Mitigation Strategy

The Town of Pine Plains has identified the following mitigation projects/activities that have also been completed but were not identified in the previous mitigation strategy in the 2010 Plan:

- Construction of beaver deterrent devices at culverts and other susceptible locations

### Proposed Hazard Mitigation Initiatives for the Plan

The Town of Pine Plains was provided the following FEMA publications to use as a resource as part of their comprehensive review of all possible activities and mitigation measures to address their hazards: FEMA 551 'Selecting Appropriate Mitigation Measures for Floodprone Structures' (March 2007) and FEMA 'Mitigation Ideas – A Resource for Reducing Risk to Natural Hazards' (January 2013). The Town of Pine Plains was provided the results to the risk assessment to further assist with the identification of mitigation actions.

Table 9.15-12 summarizes the comprehensive-range of specific mitigation initiatives the Town of Pine Plains would like to pursue in the future to reduce the effects of hazards. Some of these initiatives may be previous actions carried forward for this Plan. These initiatives are dependent upon available funding (grants and local match availability) and may be modified or omitted at any time based on the occurrence of new hazard events and changes in municipal priorities. Both the four FEMA mitigation action categories and the six CRS mitigation action categories are listed in the table below to further demonstrate the wide-range of activities and mitigation measures selected.

As discussed in Section 6, 14 evaluation/prioritization criteria are used to complete the prioritization of mitigation initiatives. For each new mitigation action, a numeric rank is assigned (-1, 0, or 1) for each of the 14 evaluation criteria to assist with prioritizing your actions as 'High', 'Medium', or 'Low.' The table below summarizes the evaluation of each mitigation initiative, listed by Action Number.

Table 9.15-13 provides a summary of the prioritization of all proposed mitigation initiatives for the Plan.





**Table 9.15-12. Proposed Hazard Mitigation Initiatives**

Initiative	Mitigation Initiative	Applies to New and/or Existing Structures*	Hazard(s) Mitigated	Goals Met	Lead and Support Agencies	Estimated Benefits	Estimated Cost	Sources of Funding	Timeline	Priority	Mitigation Category	CRS Category
TPP-1	Prepare and enact a drought management ordinance to include provisions for the approximately 6,000 acres of crop and pasture land, or 34% of total area in the Town.	N/A	Drought	1, 2, 4, 6	Town Board; Town clerk	High	Low	Staff time	OG	High	LPR	PR
TPP-2	New wildfire ordinance including defensible space measures for wildfire risk areas with improved property accounting for roughly 7,000 acres in town.	New and Existing	Wildfire	1, 2, 4, 6	Town Board; Town clerk	High	Low	Staff time	OG	High	LPR	PR
TPP-3	Culvert upgrades and replacements on Tripp McGhee Road to mitigate future flooding and soil erosion.	Existing	See Action Worksheet							Medium	SIP	SP
TPP-4	Update Chapter 100-40 (Freshwater Wetlands) and 100-411 (Local protection of streams) based on DFIRM implementation	N/A	Flood, Severe Storm	1, 2, 4, 6	Town Board; Town clerk	High	Low	Staff time	OG	High	LPR	PR
TPP-5	Code Enforcement: Enforce NYS and local Building Codes with Continual CEO Training	N/A	Earthquake, Flood, Severe Storm, Severe Winter Storm, Wildfire	1, 2, 4, 6, 7	Town Board; Town clerk; Code Enf. Officer	High	Low	Staff time	OG	High	LPR	PR
TPP-6	Join the Community Rating Systems (CRS)	N/A	Flood	1, 2, 3, 4, 5, 6, 7	Town Board, Town Clerk	High	Low	Staff time	2 years	Medium	LPR, NSP, SIP, EAP	PR, PP, PI, NR, SP, ES

**Notes:**

Not all acronyms and abbreviations defined below are included in the table.

\*Does this mitigation initiative reduce the effects of hazards on new and/or existing buildings and/or infrastructure? Not applicable (N/A) is inserted if this does not apply.

**Acronyms and Abbreviations:**

CAV Community Assistance Visit  
 CRS Community Rating System  
 DPW Department of Public Works  
 FEMA Federal Emergency Management Agency  
 FPA Floodplain Administrator

**Potential FEMA HMA Funding Sources:**

FMA Flood Mitigation Assistance Grant Program  
 HMGP Hazard Mitigation Grant Program  
 PDM Pre-Disaster Mitigation Grant Program  
 RFC Repetitive Flood Claims Grant Program (discontinued)  
 SRL Severe Repetitive Loss Grant Program (discontinued)

**Timeline:**

Short 1 to 5 years  
 Long Term 5 years or greater  
 OG On-going program  
 DOF Depending on funding





HMA	Hazard Mitigation Assistance
N/A	Not applicable
NFIP	National Flood Insurance Program
OEM	Office of Emergency Management

Costs:

Where actual project costs have been reasonably estimated:

Low	< \$10,000
Medium	\$10,000 to \$100,000
High	> \$100,000

Where actual project costs cannot reasonably be established at this time:

Low	Possible to fund under existing budget. Project is part of, or can be part of an existing on-going program.
Medium	Could budget for under existing work plan, but would require a reapportionment of the budget or a budget amendment, or the cost of the project would have to be spread over multiple years.
High	Would require an increase in revenue via an alternative source (i.e., bonds, grants, fee increases) to implement. Existing funding levels are not adequate to cover the costs of the proposed project.

Mitigation Category:

- Local Plans and Regulations (LPR) – These actions include government authorities, policies or codes that influence the way land and buildings are being developed and built.
- Structure and Infrastructure Project (SIP)- These actions involve modifying existing structures and infrastructure to protect them from a hazard or remove them from a hazard area. This could apply to public or private structures as well as critical facilities and infrastructure. This type of action also involves projects to construct manmade structures to reduce the impact of hazards.
- Natural Systems Protection (NSP) – These are actions that minimize damage and losses, and also preserve or restore the functions of natural systems.
- Education and Awareness Programs (EAP) – These are actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. These actions may also include participation in national programs, such as StormReady and Firewise Communities

CRS Category:

- Preventative Measures (PR) - Government, administrative or regulatory actions, or processes that influence the way land and buildings are developed and built. Examples include planning and zoning, floodplain local laws, capital improvement programs, open space preservation, and storm water management regulations.
- Property Protection (PP) - These actions include public activities to reduce hazard losses or actions that involve (1) modification of existing buildings or structures to protect them from a hazard or (2) removal of the structures from the hazard area. Examples include acquisition, elevation, relocation, structural retrofits, storm shutters, and shatter-resistant glass.
- Public Information (PI) - Actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. Such actions include outreach projects, real estate disclosure, hazard information centers, and educational programs for school-age children and adults.
- Natural Resource Protection (NR) - Actions that minimize hazard loss and also preserve or restore the functions of natural systems. These actions include sediment and erosion control, stream corridor restoration, watershed management, forest and vegetation management, and wetland restoration and preservation.
- Structural Flood Control Projects (SP) - Actions that involve the construction of structures to reduce the impact of a hazard. Such structures include dams, setback levees, floodwalls, retaining walls, and safe rooms.
- Emergency Services (ES) - Actions that protect people and property during and immediately following a disaster or hazard event. Services include warning systems, emergency response services, and the protection of essential facilities

Benefits:

Where possible, an estimate of project benefits (per FEMA's benefit calculation methodology) has been evaluated against the project costs, and is presented as:

Low=	< \$10,000
Medium	\$10,000 to \$100,000
High	> \$100,000

Where numerical project benefits cannot reasonably be established at this time:

Low	Long-term benefits of the project are difficult to quantify in the short term.
Medium	Project will have a long-term impact on the reduction of risk exposure to life and property, or project will provide an immediate reduction in the risk exposure to property.
High	Project will have an immediate impact on the reduction of risk exposure to life and property.



Table 9.15-13. Summary of Prioritization of Actions

Mitigation Action/Project Number	Mitigation Action/Initiative	Life Safety	Property Protection	Cost-Effectiveness	Technical	Political	Legal	Fiscal	Environmental	Social	Administrative	Multi-Hazard	Timeline	Agency Champion	Other Community Objectives	Total	Priority
TPP-1	Prepare & Enact a drought management ordinance to include provisions for the approximately 6000 acres of crop and posture land, or 34% of total area in the Town.	1	1	1	1	1	1	1	1	1	1	1	1	1	1	14	High
TPP-2	New Wildfire Ordinance including defensible space measures for wildfire risk areas with improved property accounting for roughly 7000 acres in town.	1	1	1	1	1	1	1	1	1	1	1	1	1	1	14	High
TPP-3	Culvert Upgrades and replacements on Tripp McGhee Road to mitigate future flooding and soil erosion.	See Action Worksheet														6	Medium
TPP-4	Update Chapter 100-40 (Freshwater Wetlands) and 100-411 (Local protection of streams) based on forthcoming DFIRM implementation	1	1	1	1	1	1	1	1	1	1	1	1	1	1	14	High



Table 9.15-13. Summary of Prioritization of Actions

Mitigation Action/Project Number	Mitigation Action/Initiative	Life Safety	Property Protection	Cost-Effectiveness	Technical	Political	Legal	Fiscal	Environmental	Social	Administrative	Multi-Hazard	Timeline	Agency Champion	Other Community Objectives	Total	Priority
TPP-5	Code Enforcement: Enforce NYS and Local Building Codes with Continual CEO Training	1	1	1	1	1	1	1	1	1	1	1	1	1	1	14	High
TPP-6	Join the Community Rating Systems (CRS)	1	1	1	1	1	1	0	1	1	-1	0	1	0	1	9	Medium

Note: Refer to Section 6 which contains the guidance on conducting the prioritization of mitigation actions.



### **9.15.7 Future Needs To Better Understand Risk/Vulnerability**

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None at this time.

### **9.15.8 Hazard Area Extent and Location**

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Hazard area extent and location maps have been generated for the Town of Pine Plains that illustrate the probable areas impacted within the municipality. These maps are based on the best available data at the time of the preparation of this plan, and are considered to be adequate for planning purposes. Maps have only been generated for those hazards that can be clearly identified using mapping techniques and technologies, and for which the Town of Pine Plains has significant exposure. These maps are illustrated in the hazard profiles within Section 5.4, Volume I of this Plan.

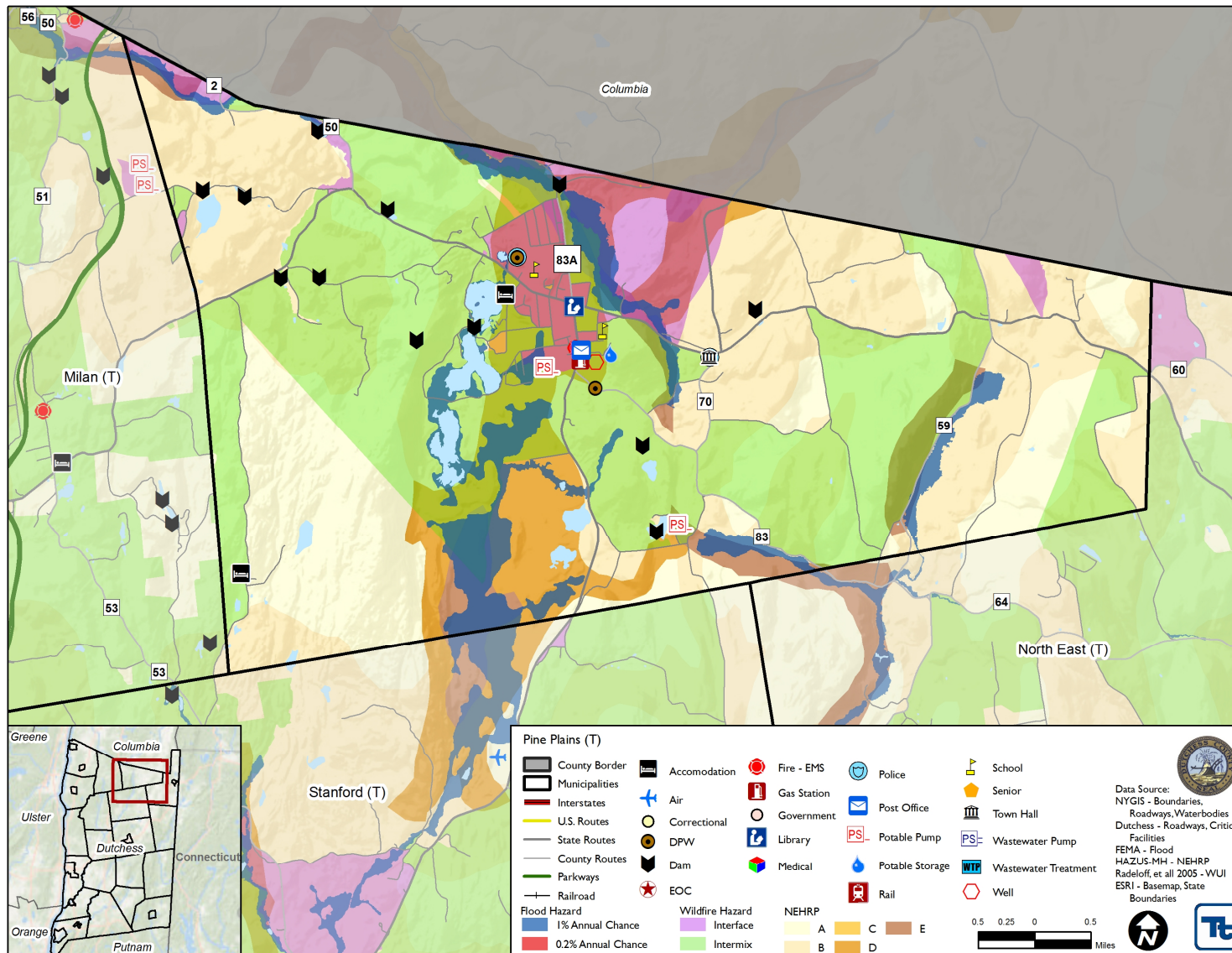
### **9.15.9 Additional Comments**

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None at this time.



Figure 9.155-1. Town of Pine Plains Hazard Area Extent and Location Map



**Action Number:** TPP-3**Mitigation Action Name:** Culvert upgrades and replacements on Tripp McGhee Road

Assessing the Risk	
<b>Hazard(s) addressed:</b>	Flood
<b>Specific problem being mitigated:</b>	Flooding and soil erosion along Tripp McGhee Road, which limits the ability of vehicles, including emergency responders, to reach their destinations.
Evaluation of Potential Actions/Projects	
<b>Actions/Projects Considered (name of project and reason for not selecting):</b>	1. Do nothing (does not solve the flooding problem on the roadway) 2. Close the roadway (limits the ability of emergency response vehicles and regular traffic to reach their destinations) 3. Upgrade/replace culverts with larger ones
Action/Project Intended for Implementation	
<b>Description of Selected Action/Project</b>	Upgrade/replace culverts along Tripp McGhee Road, including conducting engineering design to determine appropriate size.
<b>Mitigation Action Type</b>	SIP
<b>Goals Met</b>	1, 2, 6
<b>Applies to existing and or new development, or not applicable</b>	Existing
<b>Benefits (losses avoided)</b>	Lessen costly damage repairs and frequency of flooded roadway; maximize ability of emergency responders to operate during a flood event
<b>Estimated Cost</b>	High
<b>Priority*</b>	Medium
Plan for Implementation	
<b>Responsible Organization</b>	Highway Department
<b>Local Planning Mechanism</b>	Master Plan
<b>Potential Funding Sources</b>	Town Budget; PDM; HMGP; FMA
<b>Timeline for Completion</b>	3-5 years
Reporting on Progress	
<b>Date of Status Report/ Report of Progress</b>	Date: Progress on Action/Project:





Action Number:

TPP-3

Mitigation Action Name:

Culvert upgrades and replacements on Tripp McGhee Road

Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	1	
Property Protection	1	
Cost-Effectiveness	1	
Technical	1	
Political	1	
Legal	1	
Fiscal	-1	
Environmental	0	
Social	0	
Administrative	0	
Multi-Hazard	0	Flood
Timeline	-1	
Agency Champion	1	
Other Community Objectives	1	
Total	6	
Priority (Tier I, II or III)	Medium	